

UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 06-FEB-2010 TIME: 0630 HOURS

2. OPERATOR: W & T Offshore, Inc.

REPRESENTATIVE: Salter, Jeff

TELEPHONE: (504) 210-8167

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
ON SITE AT TIME OF INCIDENT:

4. LEASE: G02061

AREA: EC LATITUDE:

BLOCK: 321 LONGITUDE:

5. PLATFORM: A

RIG NAME:

6. ACTIVITY: ☐ EXPLORATION (POE)
☒ DEVELOPMENT/PRODUCTION
(DOCD/POD)

7. TYPE:

☐ HISTORIC INJURY

- ☐ REQUIRED EVACUATION
- ☐ LTA (1-3 days)
- ☐ LTA (>3 days)
- ☐ RW/JT (1-3 days)
- ☐ RW/JT (>3 days)
- ☐ Other Injury

- ☐ FATALITY
- ☐ POLLUTION
- ☐ FIRE
- ☐ EXPLOSION

- LWC ☐ HISTORIC BLOWOUT
- ☐ UNDERGROUND
 - ☐ SURFACE
 - ☐ DEVERTER
 - ☐ SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION ☐ HISTORIC ☐ >\$25K ☐ <=\$25K

- ☐ STRUCTURAL DAMAGE
- ☐ CRANE
- ☐ OTHER LIFTING DEVICE
- ☐ DAMAGED/DISABLED SAFETY SYS.
- ☐ INCIDENT >\$25K
- ☐ H2S/15MIN./20PPM
- ☒ REQUIRED MUSTER
- ☒ SHUTDOWN FROM GAS RELEASE
- ☐ OTHER

6. OPERATION:

- ☒ PRODUCTION
- ☐ DRILLING
- ☐ WORKOVER
- ☐ COMPLETION
- ☐ HELICOPTER
- ☐ MOTOR VESSEL
- ☐ PIPELINE SEGMENT NO.
- ☐ OTHER

8. CAUSE:

- ☐ EQUIPMENT FAILURE
- ☒ HUMAN ERROR
- ☐ EXTERNAL DAMAGE
- ☐ SLIP/TRIP/FALL
- ☐ WEATHER RELATED
- ☐ LEAK
- ☐ UPSET H2O TREATING
- ☐ OVERBOARD DRILLING FLUID
- ☐ OTHER _____

9. WATER DEPTH: 220 FT.

10. DISTANCE FROM SHORE: 97 MI.

11. WIND DIRECTION:
SPEED: M.P.H.

12. CURRENT DIRECTION:
SPEED: M.P.H.

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS:

On 27 January 2010, construction contractors completed a Job Safety Analysis (JSA) for the removal of two turbine compressors which were to be sent in for overhaul. As outlined in the JSA, the construction crew utilized plumber's plugs to isolate the production process piping's open flanges. Although not mentioned in the JSA, the platform is equipped with a reciprocating compressor which remained in-service, and has suction piping that is common with the turbine compressors. During the morning of 6 February 2010, when the reciprocating compressor shut down due to a process upset, flow continued from the low pressure oil wells. Pressure then increased on the low pressure system and migrated through the #1 turbine suction shut-down valve, dislodging the plumber's plug from the suction piping. Gas escaped inside the compressor building and activated a near-by gas detector. Total platform shut-in occurred and all personnel mustered at their assigned station.

Additional findings:

- * The Operator's Lock-Out and Tag-Out (LOTO) policy states that "when isolating pressurized systems, a positive method of isolation such as double block and bleed or blinding is required." The JSA recommended eliminating or reducing hazards by using "blind flanges or plumber's plug to close the line".
- * There was a lack of Operator oversight in enforcing the Operator's LOTO policy.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

The use of plumber's plugs to isolate the production process suction piping's open flanges, common with the in-service reciprocating compresor, allowed gas to activate the gas detection system inside the compressor building.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

- * All personnel involved in the task failed to familiarize themselves with the company's Lock-out & Tag-out (LOTO) policy based on the information gathered from the JSA. The JSA recommendations to eliminate or reduce hazards stated to "use blind flanges or plumber's plug to close the line". However, the plumber's plug was not the correct device to isolate the process piping. The company's LOTO policy in Section 7.10 states that "when isolating pressurized systems, a positive method of isolation such as double block and bleed or blinding is required".
- * There was a lack of Operator oversight in enforcing the Operator's LOTO policy.
- * The JSA did not adequately address hazard recognition for the operation at hand.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

N/A

ESTIMATED AMOUNT (TOTAL):

\$

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The Lake Charles District recommends that the Regional Office of Safety Management (OSM) issue a Safety Alert to heighten industries awareness of the hazards involved with improper isolation of process piping and the importance of following the company's LOTO policy.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 - Personnel failed to follow company LOTO procedures for isolation of process piping. Utilization of an unsafe work practice through the use of plumber's plugs to isolate production process piping allowed gas to escape inside the compressor building and activate the gas detection system.

25. DATE OF ONSITE INVESTIGATION:

10-FEB-2010

26. ONSITE TEAM MEMBERS:

Rick Smith / Cody LeBlanc /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Williamson, Larry

APPROVED

DATE: 01-AUG-2010

INJURY/FATALITY/WITNESS ATTACHMENT

☒ OPERATOR REPRESENTATIVE

☐ INJURY

☐ CONTRACTOR REPRESENTATIVE

☐ FATALITY

☐ OTHER _____

☒ WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

☐ OPERATOR REPRESENTATIVE

☐ INJURY

☒ CONTRACTOR REPRESENTATIVE

☐ FATALITY

☐ OTHER _____

☒ WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

